

WHAT IS CLAIMED IS:

1. An abnormality detecting device for a vehicular hydraulic pressure control circuit, which detects an abnormality that has occurred in a hydraulic pressure control circuit including an electromagnetic control valve which generates hydraulic pressure corresponding to a signal supplied from an electronic control unit, and a hydraulic switch which is turned ON when the hydraulic pressure generated by the electromagnetic control valve is equal to or higher than a predetermined value, comprising:
a determinator which keeps a power supply of the electronic control unit ON for a predetermined time after an ignition switch is turned from ON to OFF, and which detects an abnormality that has occurred in the hydraulic pressure control circuit within the predetermined time.
2. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 1, wherein the determinator determines whether the hydraulic switch is kept ON for the predetermined time, determines that an abnormality has occurred in the hydraulic switch when an affirmative determination is made in the determination, and determines that an abnormality has occurred in an element other than the hydraulic switch in the hydraulic pressure control circuit when a negative determination is made in the determination.
3. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 2, wherein the determinator determines that an abnormality has occurred in the electromagnetic control valve when a negative determination is made in the determination.
4. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 2, wherein the determinator determines that an abnormality has occurred in an oil passage between the electromagnetic control valve and the hydraulic switch, when a negative determination is made in the determination.
5. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 2, wherein the determinator detects an abnormality that has

occurred in the hydraulic pressure control circuit, when the hydraulic switch is turned ON in the case where the hydraulic pressure generated by the electromagnetic control valve should be lower than the predetermined value.

6. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 1, wherein the determinator detects an abnormality that has occurred in the hydraulic pressure control circuit, when the hydraulic switch is turned ON in the case where the hydraulic pressure generated by the electromagnetic control valve should be lower than the predetermined value.
7. An abnormality detecting device for a vehicular hydraulic pressure control circuit, which detects an abnormality that has occurred in a hydraulic pressure control circuit including an electromagnetic control valve which generates hydraulic pressure corresponding to a signal supplied from an electronic control unit, and a hydraulic switch which is turned ON when the hydraulic pressure generated by the electromagnetic control valve is equal to or higher than a predetermined value, comprising:

abnormality detecting means for keeping a power supply of the electronic control unit ON for a predetermined time after an ignition switch is turned from ON to OFF, and for detecting an abnormality that has occurred in the hydraulic pressure control circuit within the predetermined time.
8. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 7, wherein the abnormality detecting means includes hydraulic switch abnormality detecting means for determining whether the hydraulic switch is kept ON for the predetermined time, determines that an abnormality has occurred in the hydraulic switch when an affirmative determination is made by the hydraulic switch abnormality detecting means, and determines that an abnormality has occurred in an element other than the hydraulic switch in the hydraulic pressure control circuit when a negative determination is made by the hydraulic switch abnormality detecting means.
9. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 8, wherein the abnormality detecting means determines that an

abnormality has occurred in the electromagnetic control valve, when a negative determination is made by the hydraulic switch abnormality detecting means.

10. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 8, wherein the abnormality detecting means determines that an abnormality has occurred in an oil passage between the electromagnetic control valve and the hydraulic switch, when a negative determination is made by the hydraulic switch abnormality detecting means.
11. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 8, characterized in that the abnormality detecting means detects an abnormality that has occurred in the hydraulic pressure control circuit, when the hydraulic switch is turned ON in the case where the hydraulic pressure generated by the electromagnetic control valve should be lower than the predetermined value.
12. The abnormality detecting device for a vehicular hydraulic pressure control circuit, according to claim 7, characterized in that the abnormality detecting means detects an abnormality that has occurred in the hydraulic pressure control circuit, when the hydraulic switch is turned ON in the case where the hydraulic pressure generated by the electromagnetic control valve should be lower than the predetermined value.
13. An abnormality detecting method for a vehicular hydraulic pressure control circuit, for detecting an abnormality that has occurred in a hydraulic pressure control circuit including an electromagnetic control valve which generates hydraulic pressure corresponding to a signal supplied from an electronic control unit, and a hydraulic switch which is turned ON when the hydraulic pressure generated by the electromagnetic is equal to or higher than a predetermined value, comprising the steps of:
 - keeping a power supply of the electronic control unit ON for a predetermined time after an ignition switch is turned from ON to OFF; and
 - detecting an abnormality that has occurred in the hydraulic pressure control circuit within the predetermined time.
14. The abnormality detecting method for a vehicular hydraulic pressure control circuit,

according to claim 13, further comprising the following steps of:

determining whether the hydraulic switch is kept ON for the predetermined time;

determining that an abnormality has occurred in the hydraulic switch when an affirmative determination is made in the determination; and

determining that an abnormality has occurred in an element other than the hydraulic switch in the hydraulic pressure control circuit when a negative determination is made in the determination.

15. The abnormality detecting method for a vehicular hydraulic pressure control circuit, according to claim 14, wherein it is determined that an abnormality has occurred in the electromagnetic control valve when a negative determination is made in the determination.
16. The abnormality detecting method for a vehicular hydraulic pressure control circuit, according to claim 14, wherein it is determined that an abnormality has occurred in an oil passage between the electromagnetic control valve and the hydraulic switch, when a negative determination is made in the determination.
17. The abnormality detecting method for a vehicular hydraulic pressure control circuit, according to claim 14, further comprising the step of:

detecting an abnormality that has occurred in the hydraulic pressure control circuit, when the hydraulic switch is turned ON in the case where the hydraulic pressure generated by the electromagnetic control valve should be lower than the predetermined value.
18. The abnormality detecting method for a vehicular hydraulic pressure control circuit, according to claim 13, further comprising the step of:

detecting an abnormality that has occurred in the hydraulic pressure control circuit, when the hydraulic switch is turned ON in the case where the hydraulic pressure generated by the electromagnetic control valve should be lower than the predetermined value.